

CLAIMS

1. A recording apparatus for recording video data and audio data corresponding to the video data onto a disc-shaped recording medium, comprising:

data forming means for forming second video data which is data based on first video data and whose transmission rate is lower than that of said first video data, forming second audio data having a plurality of channels which is data based on first audio data having zero, one, or a plurality of channels corresponding to said first video data and whose transmission rate is lower than that of said first audio data, and outputting data of a low rate in which said second video data and said second audio data have been multiplexed; and

recording means for recording said first video data, said first audio data, and said low-rate data onto the disc-shaped recording medium,

wherein said data forming means sets said number of channels of said second audio data to a fixed value irrespective of said number of channels of said first audio data.

2. A recording apparatus according to claim 1, wherein

said data forming means forms audio data showing silence to the channels which do not correspond to the channels of said first audio data among said plurality of

channels of said second audio data and outputs said low-rate data in which said second video data and said second audio data including the channels of the audio data showing said silence have been multiplexed.

5 3. A recording method of recording video data and audio data corresponding to the video data onto a disc-shaped recording medium, comprising:

10 a data forming step of forming second video data which is data based on first video data and whose transmission rate is lower than that of said first video data, forming second audio data having a plurality of channels which is data based on first audio data having zero, one, or a plurality of channels corresponding to said first video data and whose transmission rate is lower than that of said first audio data, and outputting data of a low rate in which said second video data and said second audio data have been multiplexed;

15 and

20 a recording step of recording said first video data, said first audio data, and said low-rate data onto the disc-shaped recording medium,

 wherein in said data forming step, said number of channels of said second audio data is set to a fixed value irrespective of said number of channels of said first audio data.

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